Integrated Science

Activity	1999 Estimate	Uncontrol. & Related Chgs.	Program Redirect	Program Changes	FY 2000 Budget Request	Change from 1999
Integrated Science			30,286	17,400	47,686	47,686
Total Requirements $000	0	0	30,286	17,400	47,686	47,686

Note: The Program Redirect column reflects the redirection of funds to the Integrated Science from other program areas.

Activity Summary

Introduction

Integrated Science	FY 2000 Request
DOI Science Priorities	30,000
Place-based Studies	17,686
Total	47,686

Across the country, land- and resource-management agencies are at critical decisionmaking junctures. They require integrated scientific information and understanding to circumvent potential problems and implement needed improvements. This new budget activity was created to effectively integrate different scientific disciplines, biological, geological, hydrological, and mapping for a more unified response to critical and emerging resource management issues and challenges. As the science bureau for DOI, and the only integrated natural resources research bureau in the Federal Government, the USGS has the capability to work hand-in-hand with land managers at the local, State and national level. The USGS staff of biologists, geographers, geologists, hydrologists, and other professionals bring multidisciplinary expertise to bear on solving today's problems and provide the knowledge to land managers to ensure that decisions that are made today will not have unintended consequences tomorrow.

DOI Science Priorities — The USGS provides scientific information and tools to support the land and resource management mission of the DOI, contributing understanding of geological, hydrological, and biological systems and cycles to inform decisionmaking. Existing scientific programs and areas of expertise within USGS that are relevant to natural resource management include development of hydrologic and ecological models, tools for the evaluation, prevention, and control of the spread of invasive plants and animals, methods to restore and manage sustainable ecosystems, hydrologic and ecological monitoring data, ground-water resource assessments, and land-cover characterizations.

Fulfilling the land and resource management mission of the DOI depends on the availability of comprehensive, impartial scientific information on which to base decisions. In FY 2000, a DOI-wide process is being piloted with NPS, FWS, and BLM to assess the status of current science support, identify gaps and cross-bureau applications, formulate priorities for USGS research in support of land management needs and obtain land management bureau input for defining GPRA metrics and science outcomes. This new subactivity, DOI Science Priorities, will fund the science needs that the land management bureaus prioritize through this process. Current cooperative activities with DOI provide a $15 million base program ($9.5 million from Biological Research, $3.5 million from Water Resources

Investigations, and $2.0 million from Geologic Hazards, Resources, and Processes) for which an augmentation of $15 million is being requested to enhance existing capabilities to meet these critical information needs.

Placed-based Studies — Many of America's ecosystems are managed by Federal, State, and local agencies and private groups to serve a variety of objectives. Natural and human forces have put these areas under increasing stress. Resource managers need information to understand the current status of environmental resources and to be able to predict potential ecosystem responses to management actions. Economic realities demand effective environmental solutions and efficient resource use. The USGS works closely with Federal, State, and local resource managers to provide objective scientific data that are tailored to their information needs.

Interpreting and integrating the scientific information for decisionmaking in complex ecosystems with competing sociological and economic interests is a major program thrust of the USGS. Each of these placed-based activities is responsive to stakeholder needs. The increase will augment efforts in the Platte River, Mojave Desert, and Greater Yellowstone, and initiate new work in the Great Lakes region.

Government Performance and Results Act

Performance Targets — The following table represents the performance elements contributed by this budget activity to the GPRA Program Activities provided in aggregate in Exhibit A of the Performance Plan. Technical funding adjustments in FY 2000 were crosswalked to FY 1999 to establish base performance targets for the new Integrated Science budget activity and to normalize performance changes for the Environment and Natural Resources GPRA Program Activity. Linkages of budget and performance are further discussed in the FY 2000 Annual Performance Plan.

GPRA Program Activity	**Environment & Natural Resources**				
Goal Code	02.01.01. 01.00	02.01.01. 02.00	02.01.01. 03.00	02.01.01. 04.00	02.01.01. 05.00
Performance Measure	Long-term data collection & mngmnt efforts maintained & improved & large data infrastructures supported	New system-atic analyses & investiga-tions delivered	Decision support systems or predictive models developed or improved & delivered to customers	University-based partner-ships for natural systems analysis	Stake-holder Meetings
Bureau FY 98 Baseline	40	865	5	270	212
Bureau FY 99 Annual Target	40	843	6	272	228
Integrated Science (current structure)	N/A	N/A	N/A	N/A	N/A
Integrated Science (FY 2000 structure)	1	85	2	0	9
Bureau FY 00 Annual Target	36	875	7	272	241
Integrated Science	1	102	3	0	17